

From: [Libby Gibson](#)
To: [Erika Mooney](#)
Cc: [Kara Buzanoski](#)
Subject: FW: Baxter Road, Nantucket
Date: Sunday, March 16, 2014 8:05:32 AM
Attachments: [NLC Sconset .pdf](#)

C. Elizabeth Gibson
Town Manager
Town of Nantucket
(508) 228-7255

From: Rick Atherton [mailto:rickatherton@comcast.net]
Sent: Friday, March 14, 2014 5:59 PM
To: Libby Gibson
Subject: FW: Baxter Road, Nantucket

Libby,
FYI and for distribution to the BOS and posting on the Baxter Road page on the Town web site.
Rick

RICK ATHERTON
PO Box 3126
Nantucket MA 02584
508.228.2366
rickatherton@comcast.net

From: Emily MacKinnon [mailto:emily@nantucketlandcouncil.org]
Sent: Friday, March 14, 2014 3:08 PM
To: Philip.weinberg@state.ma.us; 'Adams, Karen K NAE'; 'Kotelly, Kevin R NAE';
Bruce.Carlisle@state.ma.us; rickatherton@comcast.net
Subject: FW: Baxter Road, Nantucket

From: Emily MacKinnon [mailto:emily@nantucketlandcouncil.org]
Sent: Friday, March 14, 2014 2:47 PM
To: 'Kouloheras, Elizabeth (DEP)'; 'Mahala, Jim (DEP)'; 'Langley, Lealdon (DEP)'; 'Boeri, Robert (ENV)'; 'Haney, Rebecca (ENV)'
Cc: 'Jeff Carlson'; esteinauer@massaudubon.org; 'Mahala, Jim (DEP)'; 'Langley, Lealdon (DEP)'; 'Boeri, Robert (ENV)'; 'Haney, Rebecca (ENV)'; phil.weinber@state.ma.us
Subject: RE: Baxter Road, Nantucket

Dear Ms. Kouloheras,

Please see the attached letter from the Nantucket Land Council in response to your email below.
Thanks for your time and have a good weekend.

Best,

Emily

Emily MacKinnon
Resource Ecologist
Nantucket Land Council, Inc.
(508) 228 2818
emily@nantucketlandcouncil.org

From: Kouloheras, Elizabeth (DEP) [<mailto:Elizabeth.Kouloheras@MassMail.State.MA.US>]
Sent: Friday, February 28, 2014 5:36 PM
To: Emily MacKinnon; Mahala, Jim (DEP); Langley, Lealdon (DEP); Boeri, Robert (ENV); Haney, Rebecca (ENV)
Cc: 'Jeff Carlson'; esteinauer@massaudubon.org; Mahala, Jim (DEP); Langley, Lealdon (DEP); Boeri, Robert (ENV); Haney, Rebecca (ENV)
Subject: RE: Baxter Road, Nantucket

Dear Ms. MacKinnon,

In your e-mail below you inquire as to whether other State permits may be necessary for the Geotube Erosion Control Project at Sconset Bluff/Baxter Road. As you know, the Town of Nantucket Conservation Commission issued a Emergency Certification under the Wetlands Protection Act and local Wetlands By-law for the emergency construction of a three tier Geotube coastal erosion control structure along the toe of the coastal bank at Sconset which included beach/bank nourishment as mitigation. MassDEP issued an extension to that Emergency Certification on Jan.19,2014. The Emergency Certification has since expired.

Relative to Chapter 91 jurisdiction and 401 Water Quality Certification (WQC) jurisdiction please be advised that jurisdiction for these two programs extends from the MHW line seaward. As stated in 310CMR 9.02 (Chapter 91) and 314CMR 9.02 (WQC) the High Water Mark/Mean High Tide Line means " the present mean high water tide line, as established by the present arithmetic mean of the water heights observed at high tide over a specific 19-year Metonic Cycle (the National Tidal Datum Epoch), and shall be determined using hydrographic survey data of the National Ocean Survey of the U.S. Department of Commerce". The Emergency Certification plan of record for this site indicates MHW at elevation + 3.04 feet , based on a mean low water datum(MLW=0.0 feet). The Geotube structure is located well above the MHW line, landward of Chapter 91 and WQC jurisdiction.

The location of the temporary sand-berm , as observed in photographs, appears to have been placed above the MHW line , at or in close proximity to the daily high tide line. However, because the MHW line is a medium/long-term average and does not take into account wave height, it is possible that the temporary sand-berm could experience some wave action and appear to be below high tide line during a particular tidal cycle or during higher wave conditions. Construction impacts to the beach were temporary in nature and the beach has been restored. Mitigation through beach nourishment is on-going.

For the above stated reasons, at the time of the issuance of the Emergency Certification under the

Wetlands Protection Act and as now, the MassDEP has determined that construction of the Geotube structure does not require Chapter 91 or WQC authorization. If you have any other questions concerning this matter please contact me at 508-946-2810 .

Regards,

Liz Kouloheras

From: Emily MacKinnon [<mailto:emily@nantucketlandcouncil.org>]
Sent: Friday, February 07, 2014 4:58 PM
To: Mahala, Jim (DEP); Kouloheras, Elizabeth (DEP); Langley, Lealdon (DEP); Boeri, Robert (EEA); Haney, Rebecca (EEA)
Cc: 'Jeff Carlson'; esteinauer@massaudubon.org
Subject: FW: Baxter Road, Nantucket

Dear Jim,

I am addressing this email to you but have included others from DEP and CZM as I am not certain who is most appropriate to address my concern. On January 28, 2014 I sent the below email to Karen Adams at the Army Corps of Engineers (CC'ing all of you) enquiring about Army Corps jurisdiction and permitting for work taking place in front of Baxter Road out here on the island. The links in the email below are to photographs of work taking place in the surf zone and presumably below the high tide line. In addition, here are some more recent photographs:

<http://www.nantucketerosion.com/01232014/asyf0aul6r5go7dbhbcitjinxrrshb>

I am aware that the Army Corps is now investigating whether appropriate permit(s) for this work have been obtained (if they are in fact necessary). I am writing to you for clarification on what other permits at the state level (Chapter 91, Water Quality Cert, etc...) may be necessary for this work, based on DEP and CZM's jurisdiction and to make sure that all appropriate agencies are involved.

I am attaching a copy of the Enforcement Order that was issued by the Nantucket Conservation Commission on Wednesday, February 5, 2014 identifying excavation work below high tide line (in addition to other unpermitted work), which you have likely already received.

Thank you all for your time.

Emily

Emily MacKinnon
Resource Ecologist
Nantucket Land Council, Inc.
(508) 228 2818
emily@nantucketlandcouncil.org

From: Emily MacKinnon [<mailto:emily@nantucketlandcouncil.org>]
Sent: Tuesday, January 28, 2014 2:26 PM
To: 'karen.k.adams@usace.army.mil'
Cc: 'Jim.mahala@state.ma.us'; 'Elizabeth.Kouloheras@State.MA.US'; 'Lealdon.Langley@State.MA.US'; 'Robert.Boeri@state.ma.us'; 'Haney, Rebecca (ENV)'; 'Jeff Carlson'; 'esteinauer@massaudubon.org'
Subject: Baxter Road, Nantucket

Dear Karen,

My name is Emily MacKinnon and I am an ecologist for the Nantucket Land Council, a non-profit organization focused on preserving the natural resources of Nantucket Island.

As you may or may not be aware, a large scale coastal engineering project was granted an Emergency Certification to the joint applicants the Town of Nantucket and Siasconset Beach Preservation Fund (SBPF) by MA DEP and the local Conservation Commission on 12/19/13. The Certification allows for a three geotextile tube coastal engineering structure with sand cover to be installed on a Coastal Beach and Coastal Bank. The project has not been completed, but I understand the applicants are requesting an extension and will also be coming before the Conservation Commission to obtain an Order of Conditions for the work completed under the Emergency Certification.

I am writing to you because over the course of the past four weeks I am concerned that the applicants have been working outside the parameters of their permit. They have clearly been performing significant excavation from the Coastal Beach directly in the surf zone and below the high tide line. The applicant, SBPF, has been before the Commission many times regarding alternative projects in the same location. We have had many discussions in various public hearings regarding the need for an Army Corps of Engineers permit (and others) should work be required below the annual high tide line. In this instance the issue has been ignored and it appears that without benefit of appropriate permits significant work has been done in your jurisdiction.

The following photographs are just a few examples of many taken by local photographers documenting this activity:

<http://www.nantucketerosion.com/01192014/p0hptx9a0t3tfz464uhec4z80rqvaw>

<http://www.nantucketerosion.com/01172014day/9rg0juupb5ygmyg05w6q3k6rrn565q>

<http://www.nantucketerosion.com/01172014day/5u9nru7mbzo4g3w7hij85utwnipwhp>

I am requesting your involvement and input on this matter. If enforcement action is appropriate it should be undertaken prior to the issuance of an Order of Conditions for the work so that it can become part of the public hearing process.

Thank you very much for your time,
Emily

Emily MacKinnon
Resource Ecologist
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Nantucket Land Council, Inc.

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March 14, 2014

Liz Kouloheras

Massachusetts Department of Environmental Protection

Southeast Region, Lakeville and Cape Cod

20 Riverside Drive

Lakeville, MA 02347

Re: Geotube Construction - Baxter Road, Nantucket

Dear Ms. Kouloheras,

We appreciated receiving your email of February 28, 2014 written in response to Emily MacKinnon's request for additional information regarding the appropriate permitting of the Geotube construction in front of Baxter Road, Nantucket.

It appears that we were not clear enough in our original description of the aspects of the Baxter Road Project that went beyond the scope of the Emergency Certification and occurred within Chapter 91 jurisdiction during the construction of the geotube revetment. The plans and technical information that were submitted with the emergency request showed that the geotube revetment structure and mitigation nourishment would be located landward of the MHW line on the beach adjacent to the coastal bank. The geotubes were to be filled with beach compatible material from borrow sources located on Nantucket. Once the material was on site, the sand was to be fluidized with saltwater from the Atlantic Ocean to allow the sediment to be pumped into the geotubes. During discussions with the Nantucket Conservation Commission about the Emergency Geotube Revetment, the applicant's representatives described placing a saltwater intake offshore of the beach on a buoy to provide a continuous water supply for the fluidizing process. However, that procedure was not followed during the construction of the geotubes. For the filling of each geotube, the



contractor under the supervision of the Applicant's representative, excavated a trench in the beach seaward of the geotube revetment. Material excavated from the trench was piled into a berm seaward of the trench to prevent waves from filling the excavation. The end of the trench was excavated through the beach into the Atlantic Ocean to provide a continuous source of saltwater into the basin at all phases of the tide. Due to the volume of water being pumped, it was necessary to maintain a trench to the ocean at all phases of the tide, requiring constant excavation to remove littoral sediments from the trench entrance, as the trench constantly shoaled due to wave action. The fluidizing pump intake had to remain submerged to allow for a continuous supply of saltwater to fill the geotubes with the saltwater/sand slurry. The trench was excavated well below the surface of the ocean (MHW elevation), causing re-establishment of a Mean High Water line into the beach – similar to excavation of a marina into an upland.

Due to the unpermitted construction approach selected by the applicant, use of the pump in this fashion required complete submergence of the pump and a trench to the ocean that could guarantee a water supply during all phases of the tide. Therefore, it is not physically possible that the trench did not require a Chapter 91 permit. Attached to this letter are a series of photographs illustrating the trenching process that was used for the construction of the geotubes. The photographs clearly illustrate the location of the excavation seaward and below the MHW line, as excavation of the trench automatically re-establishes the position of Mean High Water. The contractor was clearly manipulating the location of the MHW line during the construction of the revetment, which according to 310CMR 9.02 is defined as dredging and fill respectively,

Dredging means the removal of materials including, but not limited to, rocks, bottom sediments, debris, sand, refuse, plant or animal matter, in any excavating, cleaning, deepening, widening or lengthening, either permanently or temporarily, of any flowed tidelands, rivers, streams, ponds or other waters of the Commonwealth. Dredging shall include improvement dredging, maintenance dredging, excavating and backfilling or other dredging and subsequent refilling.

Fill means any unconsolidated material that is confined or expected to remain in place in a waterway, except for: material placed by natural processes not caused by the owner or any predecessor in interest; material placed on a beach for beach nourishment purposes; and dredged material placed below the low water mark for purposes of subaqueous disposal.

It is clear that the Applicant changed construction procedures after the Emergency Certification was issued and failed to notify Massachusetts DEP, USACE, and the Nantucket Conservation Commission about the expanded extents of the project, the impacts associated with the revised construction protocols, and the

permitting requirements that were associated with dredging and fill below the MHW line as a means to fill the geotubes. If the Applicant contends that no part of the construction process manipulated the position of the MHW nor was completed seaward of the MHW line, then they should have provided engineering plans showing the positions and elevations of the excavated trenches certified by either the project engineer or a professional land surveyor who was on site during the filling of the geotubes. Simply stating that the high tide line was staked prior to construction and then respected during the construction processes does not provide convincing evidence to counter the numerous photographs showing the contractor manipulating the position of the MHW line through dredging and filling of the beach.

We are formally requesting that DEP provide all documentation received from the Applicant or their representatives that prove excavation was not done below the MHW line. Photographic evidence clearly shows that excavation occurred below MHW, as the pictures show a calm sea with very minor wave runup in all cases and excavation in the water. In addition, it is our understanding that DEP routinely bases enforcement action on similar photographic and observational information. Therefore, it remains unclear how DEP could arrive at their erroneous conclusion regarding the clear violation of state statutes. Further, while we understand the position of DEP regarding temporary construction impacts and subsequent restoration as measures to limit the need for state permits,

Construction impacts to the beach were temporary in nature and the beach has been restored. Mitigation through beach nourishment is ongoing.

these statements are not relevant nor are they an accurate representation of the laws that govern the dredging and filling of a beach seaward of the MHW line.

It is likely that additional work will be proposed on the coastal beach adjacent to this project in the future. The process by which state agencies determine what constitutes work below MHW, as defined by state statutes, must be transparent and clear. **In addition, we formally request any and all inter-departmental communications and/or communications with others regarding this issue be provided. If the Department has difficulty complying with this request, you can treat this as a Freedom of Information Act Request.**

(Photographs were provided by Dirck and Sharon Van Lieu of Van Lieu Photography. The Van Lieu's documented the construction of the geotube structure on a daily basis, they have taken hundreds of photographs documenting the clear violations of the state statutes regarding Chapter 91 jurisdiction. The entire series of photographs are available for viewing through Van Lieu Photography's website, <http://www.nantucketerosion.com/>.)

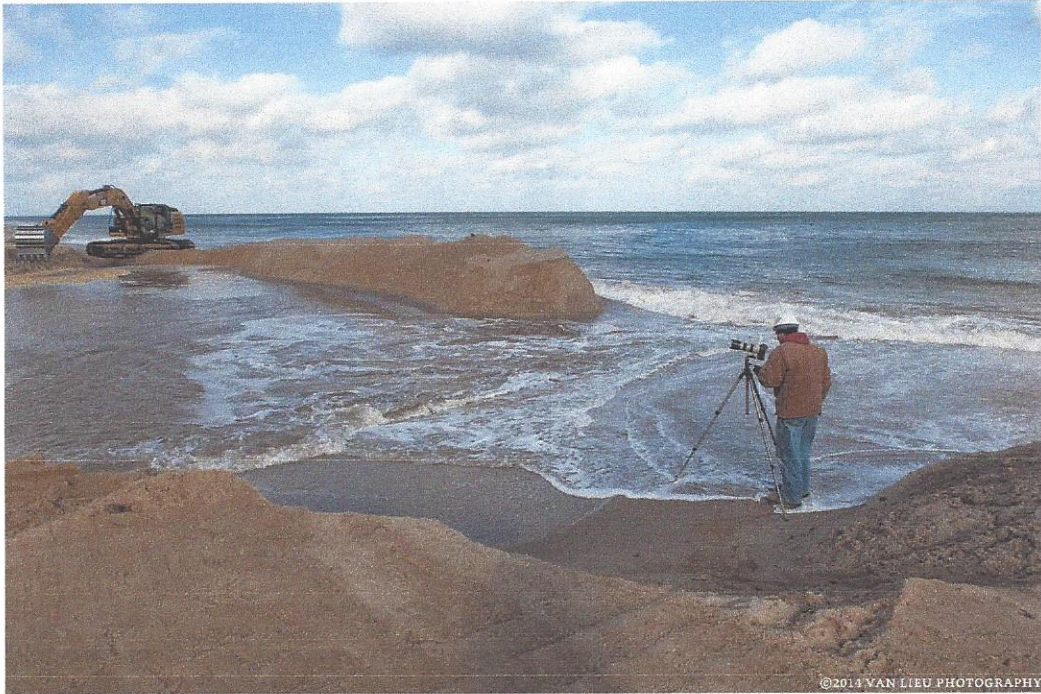


Figure 1: A photograph illustrating the use of an excavated trench in the beach seaward of the geotube revetment with material excavated from the trench piled into a berm. The end of the trench has been excavated through the beach into the Atlantic Ocean allowing the fluidize pump to be completely submerged. Note the calm ocean waters and resulting lack of wave setup and runup.



Figure 2: A bulldozer grading the beach after the second geotube was filled. The trench in the beach face is still evident with the inlet to the trench from the Atlantic Ocean. The inlet has almost completely shoaled in due to wave action.



Figure 3: A bulldozer grading the remnants of a fluidizing trench and berm on Sconset Beach, the berm and bulldozer are clearly seaward of the mean high water line.



Figure 4: An excavator removing its bucket full of sediment from the Atlantic Ocean. The beach on the right side of the photograph clearly illustrates that the construction activities are occurring seaward of the MHW line. Note the calm ocean waters and resulting lack of wave setup and runup.



Figure 5: Note the calm ocean waters and resulting lack of wave setup and runup with an excavator sitting on a sand berm constructed seaward of the MHW line while excavating material from the ocean bottom.

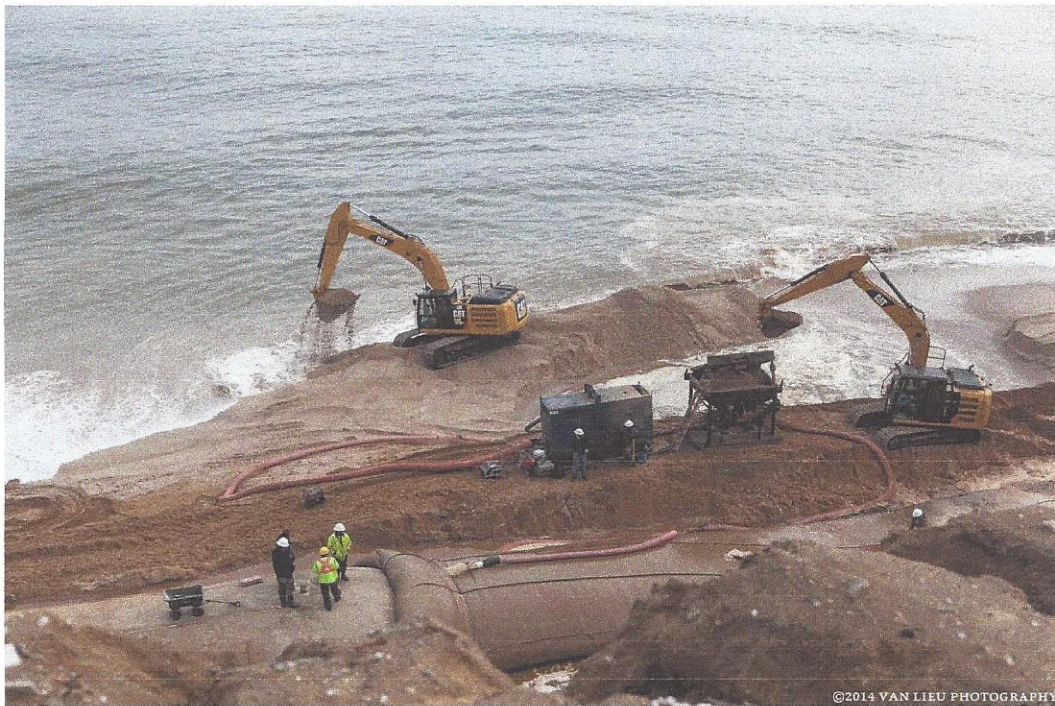


Figure 6: An excavator sitting seaward of the MHW line stabilizing the sand berm which is used to protect the trench from which saltwater is continuously drawn at all phases of the tide to fill the geotubes. Note that the pump intake is completely submerged.



Figure 7: An excavator dredging material from below the ocean surface clearly seaward of the MHW line. Note the lack of significant wave uprush within the surf zone.



Figure 8: An excavator dredging material from below the ocean surface at night. This illustrates that construction activities were occurring at all phases of the tide and manipulations of the MHW line clearly resulting in dredging and filling seaward of the MHW line.

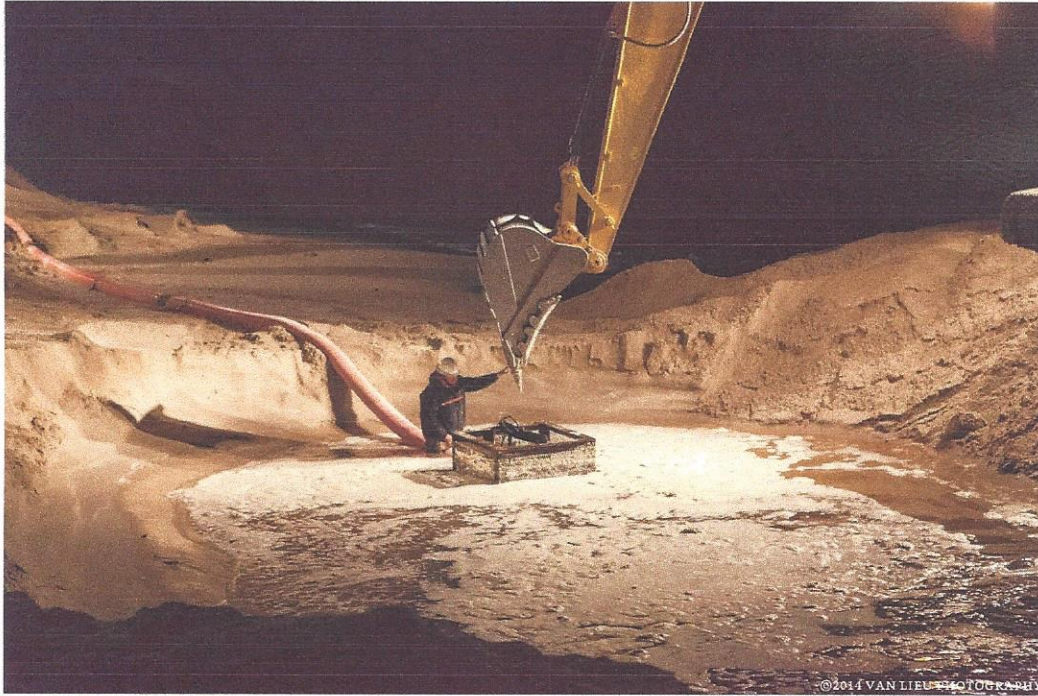


Figure 9: An excavator adjusting the position of the saltwater intake for the fluidizing pump. Note the size of the intake relative to the individual in the water. The size of the intake requires at a minimum an excavation of 3 to 4 feet below the surface of the ocean to keep the intake submerged under all phases of the tide.



Figure 10: An excavator dredging material from below the ocean surface. Could DEP provide clarification on the position of the MHW in this photograph? Note the calm ocean waters and resulting lack of wave setup and runup.



Figure 11: An excavator dredging material from atop the berm constructed seaward of the trench used to supply saltwater to the fluidize pump. A clear illustration of the contractor operating seaward of the MHW line.

Thank you for your time,

Cormac Collier
Executive Director

CC: Phil Weinberg, Mass DEP
Jim Mahala, Mass DEP
Lealdon Langley, Mass DEP
Robert Boeri, Mass DEP
Rebecca Haney, Mass CZM
Bruce Carlisle, Mass CZM
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